

# **1.INTRODUCTION**

The Navy Cost of Manpower Estimating Tool (COMET) was developed to enable defense contractors and Navy cost analysts to accurately and consistently estimate personnel-related costs associated with the acquisition process. The program allows users to view the direct and variable indirect costs associated with an individual and also, to view the final variable costs for specific skill groups. Users can view all-Navy costs as well as occupation-specific costs. With this capability, system developers and project officers are able to assess the economic impact on life cycle costs of hardware/manpower tradeoff alternatives.

The COMET program is a Windows95 program. The data files are quite robust, and considerable experimentation is possible with no danger of corrupting the underlying cost data. From the user's point of view, COMET is divided into three functional parts: (1) individual billet data, (2) final cost file creation/modification, and (3) life cycle cost modeling. Individual billet data may be viewed down to the level of specific variable costs by selecting a rating or designator. Individual average costs per pay grade may be viewed as well. Final cost file creation/modification allows the user to create a final cost estimate using assumptions other than the COMET defaults. These files are then available as cost "building blocks" and are used by analysts in creating a variety of costing scenarios.

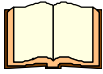
There are three operative modules in the COMET Active program that execute the following tasks:

1. Input new structured cost and final cost default datasets from input files.
2. Create user datasets from default and customized cost parameters, and enable or disable premium pays.
3. Define manpower requirements for a project and run final costs over a variable-length period, then view, print, or export results.

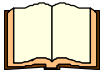
## **1.1 COMET PROGRAM DOCUMENTATION**

There are separate cost estimation modules for the Navy's Active Duty, Reserve, and Civilian components. Since each component has both an *Operations Manual* and a *User's Manual*, the entire COMET Program documentation set encompasses six manuals, as shown below:

### **Active Component:**

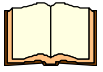


*Active Component Operations Manual*

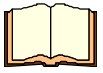


*Active Component User's Manual* (this document)

### **Reserve Component:**

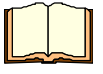


*Reserve Component Operations Manual*

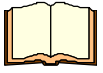


*Reserve Component User's Manual*

### **Civilian (Government employees) Component:**



*Civilian Component Operations Manual*



*Civilian Component User's Manual*

## **1.2 PURPOSE OF THIS MANUAL**

It is recommended that users read the *Active Component Operations Manual* before reading this document. The *Operations Manual* describes data flows, algorithms, and processes used in calculating costs for COMET, and will enable users to better understand how the model works, under what circumstances the model is used, and the methodology and data sources used.

In contrast, this manual is more of a typical user's manual that provides applicable information and instruction on how to run the model, including a tutorial that teaches how and where to enter data, identify elements critical to the model, and produce output.

## **1.3 SYSTEM REQUIREMENTS**

The following minimum system requirements are necessary to run the COMET program:

- IBM compatible with 486 CPU or higher
- At least 8mg RAM installed
- Color EGA, VGA, or SVGA monitor
- At least 20MB of hard disk space available
- Windows95

## **1.4 INSTALLATION**

1. Go to Start Menu, Settings option
2. Click on Control Panel
3. Click on the "Add/Remove Programs" icon
4. Load disk number one and click the "Install" button. Windows95 will automatically locate the setup and prompt you with more instructions
5. At the end of the installation, a "Setup Complete" dialog box will inform you that the installation is complete and give you the option to reboot the computer. At this time, reboot the computer. The program will not work correctly unless the computer is rebooted.
6. To start program, go to the Start Menu and point to "Programs." The Program menu will appear. A separate folder has been created for COMET programs. Point to the COMET folder. This folder contains the short cuts for all COMET models installed on the computer.
7. Click "COMET\_ACTIVE\_COMPONENT" to start the program.
8. To uninstall application, use the "Add/Remove Programs" option

## **2.OVERVIEW OF MENU OPTIONS**

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The COMET Active Component main menu is the starting point to view, edit, run and print both enlisted and officer cost data by skill. It also the place to activate the Life Cycle Cost Module. Each of these functions is described below.

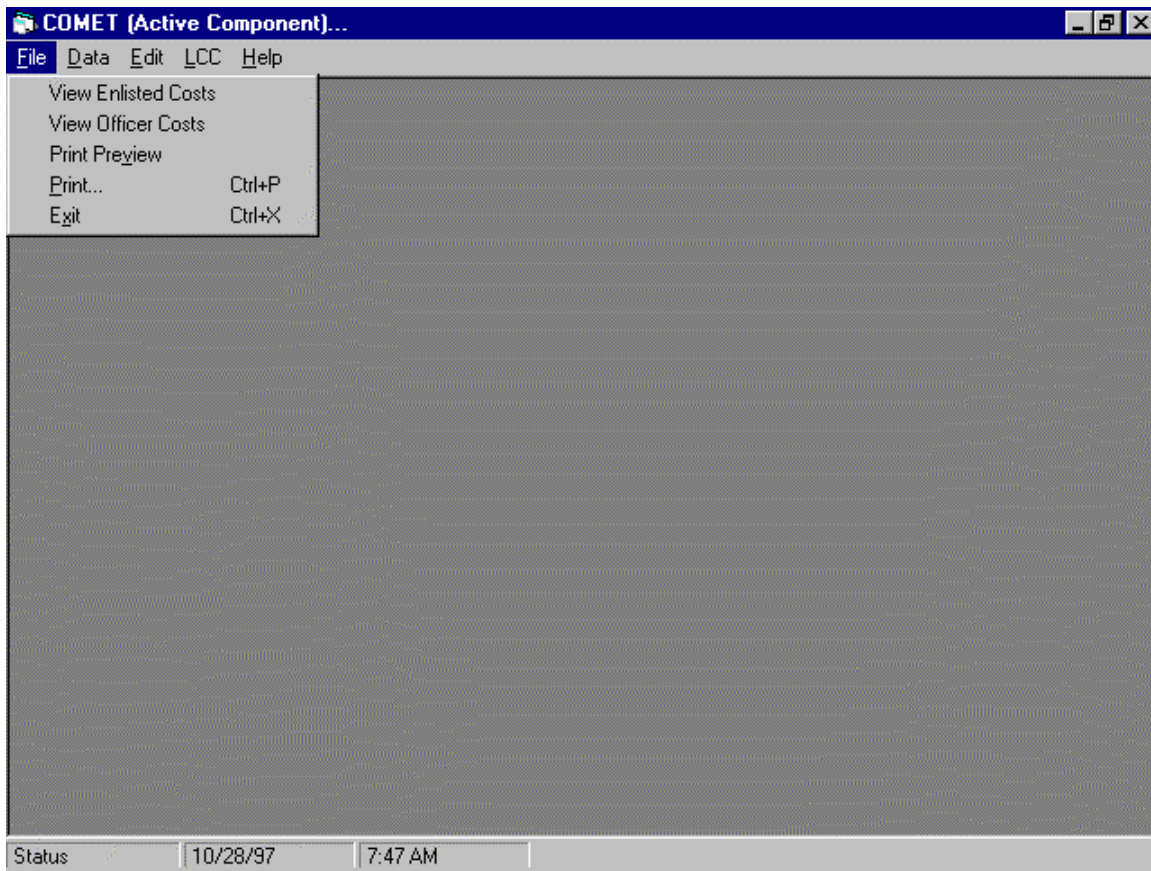
To begin COMET-A, double click on the appropriate icon. The main menu provides the following options:

- File
- Data
- Edit
- LCC
- Help

As is common in Windows95 programs, each option on a menu can be accessed by either clicking the key word with the mouse or holding down the <Alt> key and the underlined letter (F, D, E, L or H).

### **2.1 FILE**

This menu option provides the user the option to print or export various standard reports. In addition, there are options that allow the user to view either enlisted or officer costs.



COMET-A File Menu

### **2.1.1 View Enlisted Costs**

After selecting the “View Enlisted Costs” option, the user will see a box with all of the available enlisted cost files listed. Highlight the cost file of interest and press <Enter>. The all-Navy costs associated with that cost file will then appear. The name of the cost file and the rating appear at the top of the screen.

View Enlisted Database

DATABASE: DEFAULT.FEN

RATING: ZZZZZZ ALL NAVY

Type of Cost

E1-3

E4

E5

E6

E7

E8

E9

Final Cost From DEFAULT.FEN

Direct Cost							
MPN	26854.36	37750.84	45093.39	53861.83	62841.05	72867.22	85823.85
Other	748.63	748.63	748.63	748.63	748.63	748.63	748.63
sub total (Direct)	27602.99	38499.47	45842.02	54610.46	63589.68	73615.85	86572.48
Variable Indirect Cost							
MPN	19395.71	19395.71	19395.71	19395.71	19395.71	19395.71	19395.71
OMN	5225.1	5225.1	5225.1	5225.1	5225.1	5225.1	5225.1
Other	3539.98	4033.7	5546.45	7553.73	8108.65	9593.88	9821.79
sub total (Var. Indirect)	28160.79	28654.51	30167.26	32174.54	32729.46	34214.69	34442.6
TOTALS	55763.78	67153.98	76009.28	86785	96319.14	107830.5	121015.1

DIRECT COSTS

MPN Military Compensation							
ac_mc	18946.77	24537.87	29316.72	34749.69	40400.11	46835.81	54976.16
ac_bp	12031.67	15247.98	18330.00	22469.66	26480.55	31477.33	38190.64
ac_baq1	2934.09	4044.83	5025.57	5813.91	6428.94	7073.50	7699.07
ac_vha1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ac_baq2	993.00	2257.05	2973.15	3478.12	4502.61	5296.98	6098.45
ac_vha2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ac_bas	2988.00	2988.00	2988.00	2988.00	2988.00	2988.00	2988.00
MPN Enlistment Bonus							

Select Rating

Variable Indirect Costs

Select Cost DB

Quit

Status

10/28/97

7:47 AM

*View Enlisted Database*

By pressing the “Select Rating” button located at the bottom of the screen, the user will activate a scroll box containing the names of all the occupations available (both ratings and EMCs). Scroll through the box until the selected rating is highlighted and press <Enter>.

The screenshot shows the 'View Enlisted Database' window. At the top, it displays 'DATABASE: DEFAULT.FEN' and 'RATING: ZZZZZZ ALL NAVY'. Below this is a table with columns for 'Type of Cost' and ratings E1-3 through E9. The main area shows 'Final Cost From DEFAULT.FEN' with a table of costs for various categories like Direct Cost, MPN, Other, sub, Vari, MP, OM, Oth, sub, and TOT. An 'Enlisted List...' dialog box is open, showing a list of job titles such as 'AB AVIATION BOATSWAIN'S MATE', 'ABE AVIATION BM - LAUNCHING AND RECOVERY', etc. The bottom of the window has buttons for 'Select Rating', 'Variable Indirect Costs', 'Select Cost DB', and 'Quit'. A status bar at the very bottom shows 'Status', '10/28/97', and '7:47 AM'.

Type of Cost	E1-3	E4	E5	E6	E7	E8	E9
Direct Cost							
MPN	26854.36	37750.84	45093.39	53861.83	62841.05	72867.22	85823.85
Other	748.63	748.63	748.63	748.63	748.63	748.63	748.63
sub							
Vari							
MP							
OM							
Oth							
sub							
TOT							
ac_vha1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ac_baq2	993.00	2257.05	2973.15	3478.12	4502.61	5296.98	6098.45
ac_vha2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ac_bas	2988.00	2988.00	2988.00	2988.00	2988.00	2988.00	2988.00
MPN Enlistment Bonus							

*Select Rating Screen*

The subtotals and totals for the major cost appropriations is listed on the top half of the screen. When the costs first appear, the detail associated with the direct costs are listed on the bottom half. Use the scroll bar on the left side to scroll down through the costs. To see the variable indirect costs, click on the “Variable Indirect Costs” button. The user may change the cost file he or she is viewing by pressing the “Select Cost DB” button.

## 2.1.2 VIEW OFFICER COSTS

This menu item is functionally identical to the first. Select designators by pressing the “Select Designator” Button.

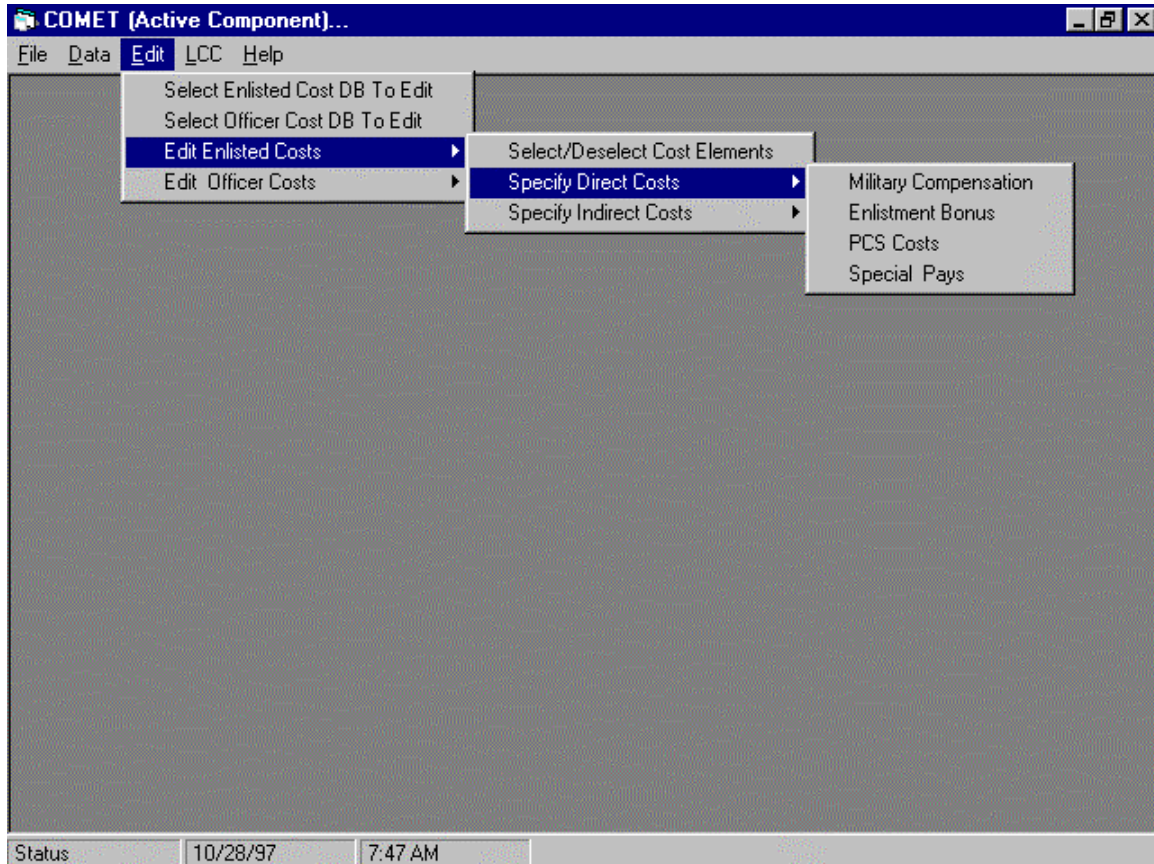
View Officer Database						
DATABASE: DEFAULT.FOF			DESIGNATOR: 9999 All Navy Reserve Officer			
Type of Cost	01	02	03	04	05	06
<b>Final Cost From DEFAULT.FOF</b>						
<b>Direct Cost</b>						
MPN	43719.25	70483.79	81968.69	98247.3	121780.6	158147.5
Other	0.00	0.00	0.00	0.00	0.00	0.00
sub total (Direct)	0.00	0.00	0.00	0.00	0.00	0.00
<b>Variable Indirect Cost</b>						
MPN	28308.13	28308.13	28308.13	28308.13	28308.13	28308.13
OMN	7992	7992	7992	7992	7992	7992
Other	0.00	0.00	0.00	0.00	0.00	0.00
sub total (Var. Indirect)	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTALS</b>	<b>82153.06</b>	<b>108373.4</b>	<b>121321.1</b>	<b>138572</b>	<b>162954.6</b>	<b>198371</b>
<b>DIRECT COSTS</b>						
MPN Military Compensation						
ac_mc	28939.37	38078.9	47308.09	57408.68	68459.3	82072.13
ac_bp	22224.29	30371.04	38132	46416.7	56181.14	69192.94
ac_baq1	4865.16	5857.95	7326.18	9142.06	10428.25	11029.27
ac_vha1	0.00	0.00	0.00	0.00	0.00	0.00
ac_baq2	3981	4991.06	5885.32	7137.14	9521.85	10649.23
ac_vha2	0.00	0.00	0.00	0.00	0.00	0.00
ac_bas	1849.92	1849.92	1849.92	1849.92	1849.92	1849.92
MPN PCS Costs						
<div> <div>9999</div> <div>Select Designator</div> <div>Variable Indirect Costs</div> <div>Select Cost DB</div> <div>Quit</div> </div>						
Status				10/30/97	10:53 AM	

*View Officer Costs*



## 2.2 EDIT COSTS

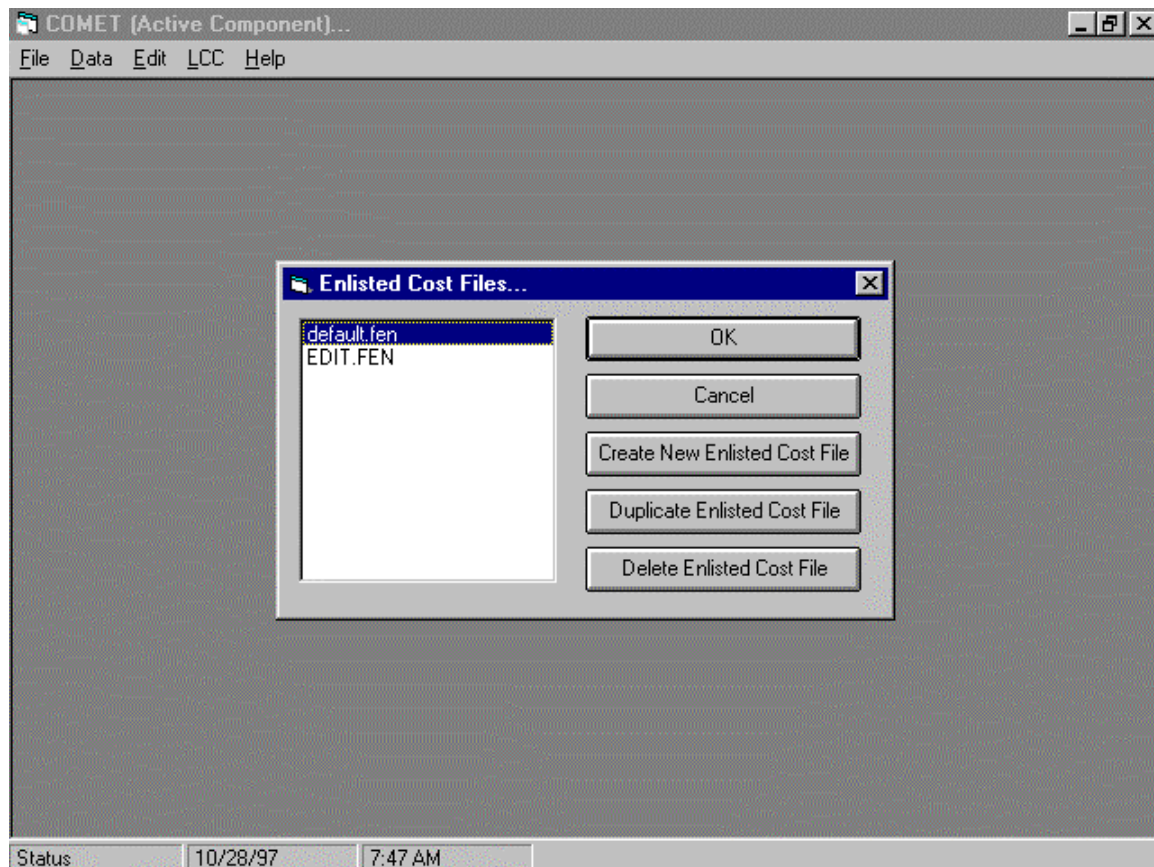
The cost file parameters for both the enlisted and officer final cost files can be changed to create customized datasets for various run scenarios.



*Edit Menu Option*

### 2.2.1 Select Cost DB to Edit

The user must select or create a cost database before editing any of the cost parameters. On initial installation, the only file in the list will be the DEFAULT final file. The user may not edit this file. The “Select Enlisted Cost DB to Edit” and the “Select Officer Cost DB to Edit” options work identically, so only the enlisted option will be discussed here.



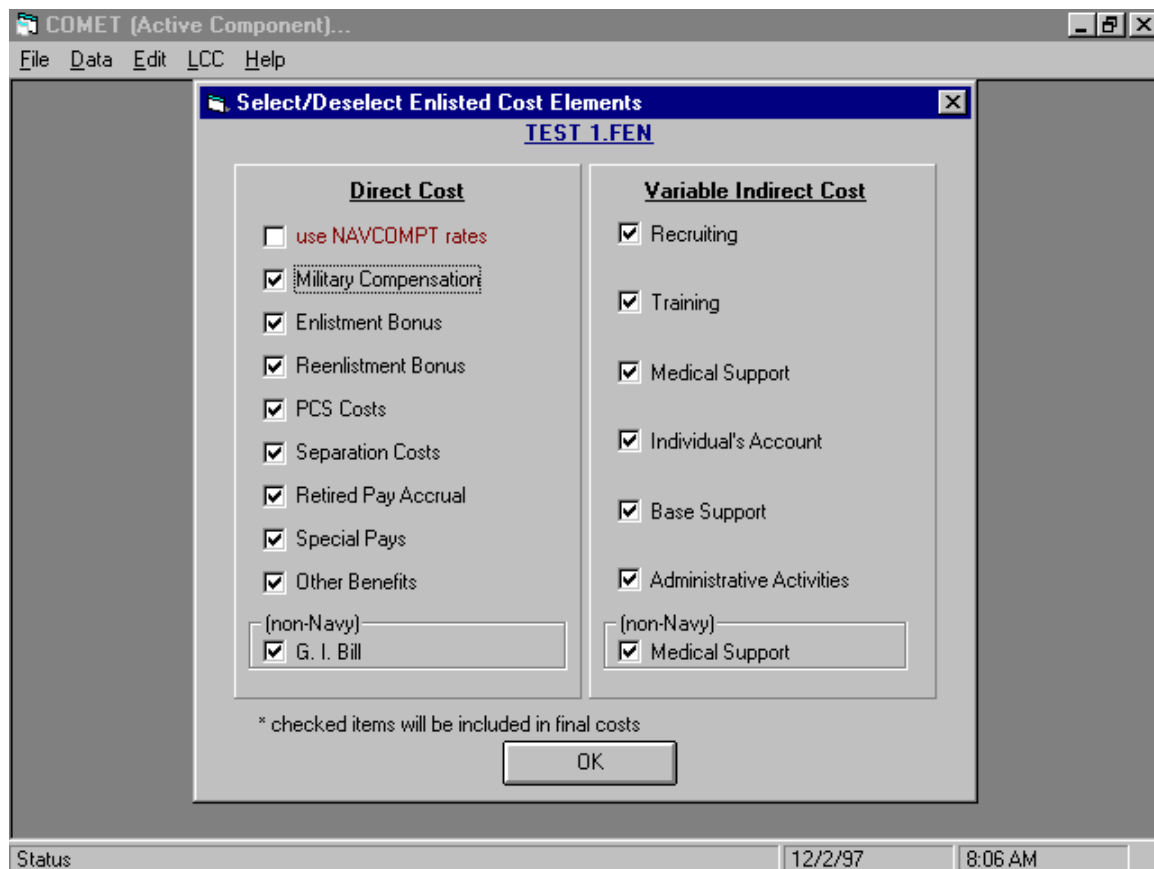
*Select Enlisted Cost DB Screen*

To create a new final file, type in a name for the new file (without an extension) when prompted, and press <Enter>. This new file will then be added to the list of choices. Before any editing, this new file will be a replica of the DEFAULT.FEN file. Once selecting a final cost file to edit, the screen will change to display the Final Cost File Editor where one may change elements of the final cost file. To create a copy of an existing cost DB (other than the default), highlight the filename of the cost DB to be copied and press “Duplicate Enlisted Cost File” button. All cost DB’s with the exception of the default can be deleted by highlighting its name and pressing the “Delete Enlisted Cost File” button. To select the cost DB to be edited, highlight its file name and press “OK.”

## **2.2.2 Edit Enlisted Costs**

In the Final Cost File Editor the user may change some of the underlying assumptions associated with a final cost file. Some of the choices are merely toggles to force the final file to take different weights or variables into account when calculating, while others are more elaborate.

The first step in creating a user-specific final cost file is to select the major cost elements to be included. Simply use the mouse to click on the included costs. Click the “OK” button when finished. If the user selects the “use NAVCOMPT rates” option, all other direct costs will be deselected automatically.



*Select/Deselect Enlisted Cost Elements*

### **2.2.2.1 Specify Direct Costs - Enlisted**

The next step is to specify the direct cost options. The following cost elements are available for additional editing:

- Military Compensation
- Enlistment Bonus
- PCS Costs
- Special Pays

### **Military Compensation**

There are four components of military compensation - basic pay, BAQ, BAS and VHA. All four can be edited from this screen. The user can choose whether to include basic pay and BAS. He or she can select to calculate BAQ assuming some members receive some BAQ payments in-kind. For VHA, the user may choose to input amounts for specific rating and grade combinations.

COMET (Active Component)...

File Data Edit LCC Help

**Edit Enlisted Military Compensation**

Cost File: TEST 1.FEN

Basic Pay

☒ use default averages in final costs ☐ do not include in final costs

BAQ

☒ all in-cash (used in final costs) ☐ some in-kind

BAS

☒ use default averages in final costs ☐ do not include in final costs

VHA

☐ use default averages in final costs ☒ select ratings and grades for input

Choose rating

AB

select grade

E1

amount

0

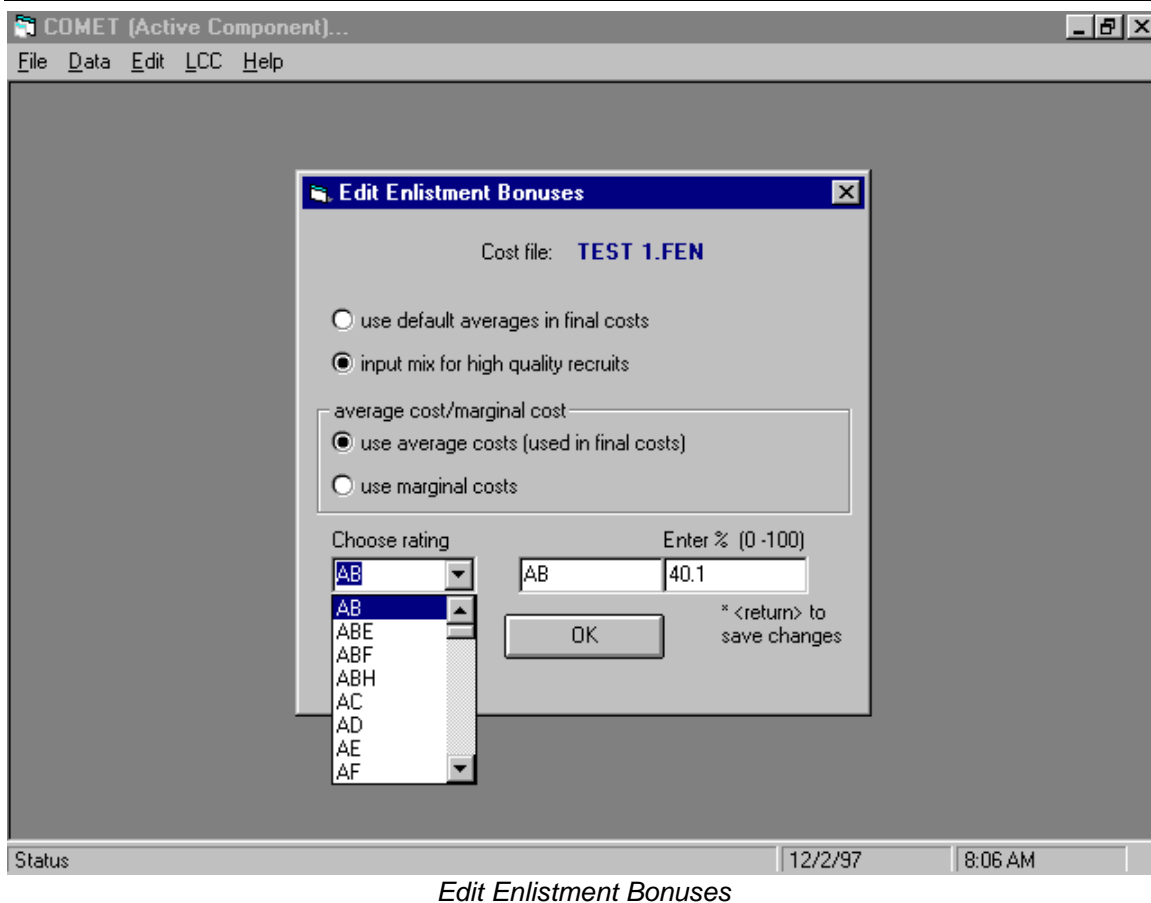
OK

Status 12/2/97 8:06 AM

*Edit Military Compensation*

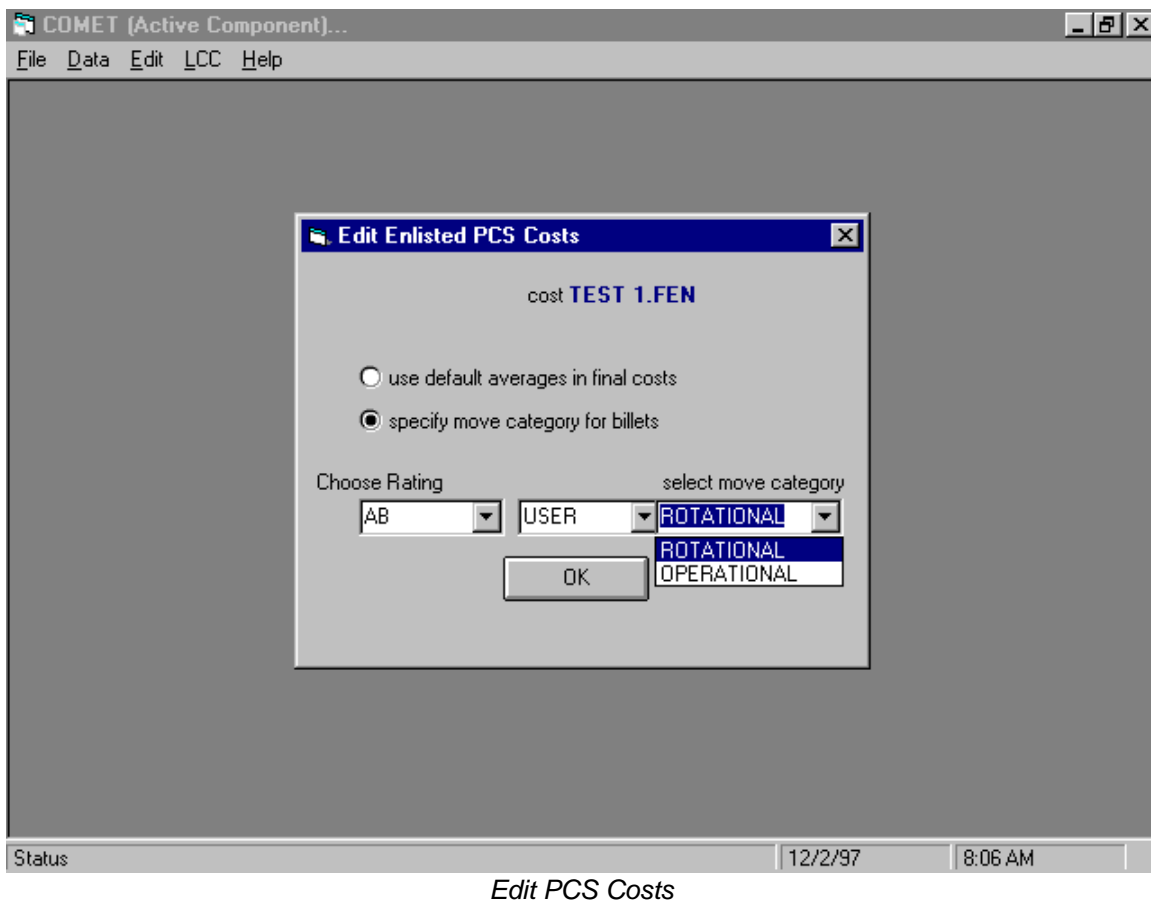
### **Enlistment Bonus**

The user has the option of using the default quality mix or inputting a new mixture for any rating. Any changes to the quality mix entered here will also be reflected on the indirect side under enlisted recruiting. If the user chooses to input a new percentage of high quality mix, the bottom of the screen will become active. The user must then pick the ratings that he or she wishes to edit and enter a new percentage of high quality recruits. Any rating that does not have a new percentage entered here will receive the default average. Note that the user must press the <return> key to save any percentage changes. In addition, the user can decide to use either marginal or average costs.



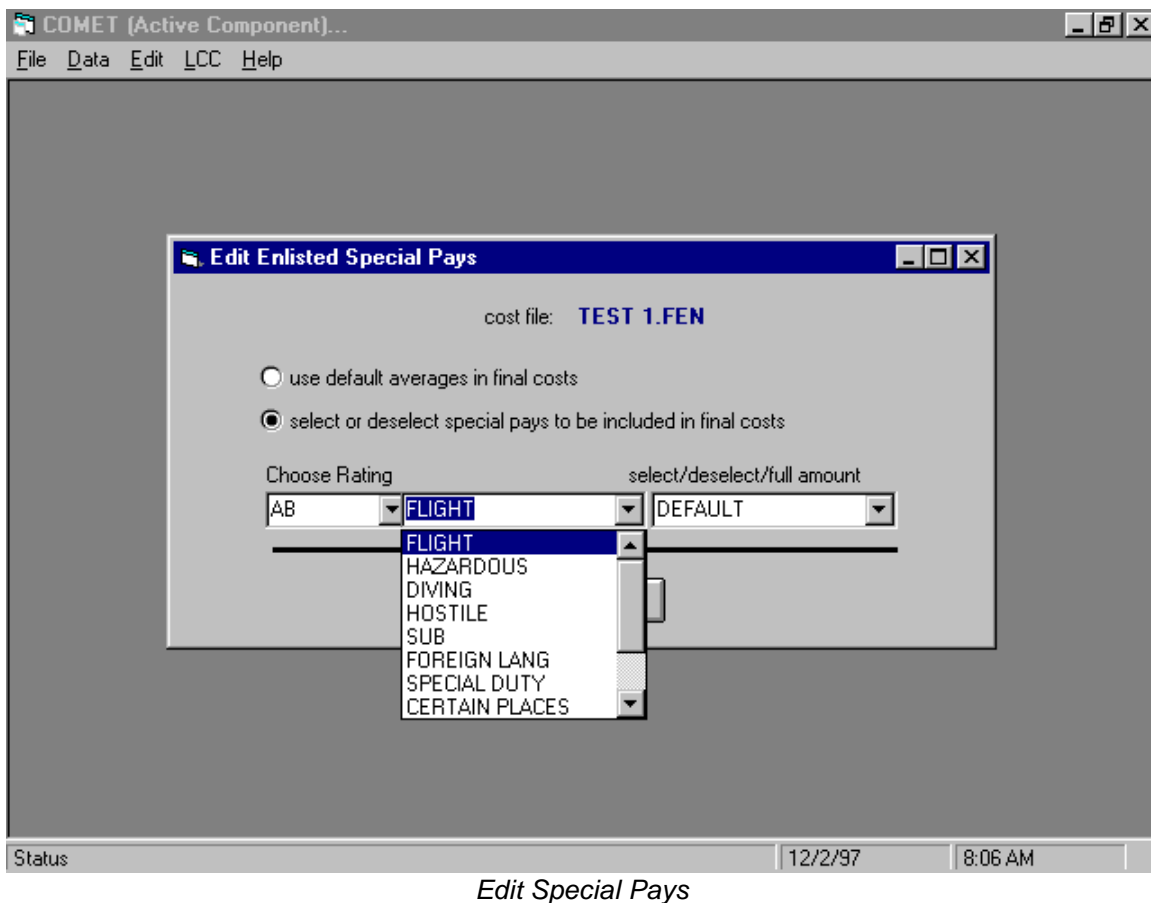
### **PCS Costs**

For each rating, the user must select whether to use the default average or a user selected move category (second box of the three). Each rating is automatically assigned the default average unless the option is changed in this screen. If the user option is chosen for a rating, the third box will become active. PCS costs will become the full amount of the move category selected here.



### **Special Pays**

The user may choose to either use the default averages or to select or deselect the special pays to be included in each rating. In this screen, the user must select the rating to which actual costs of a special pay are attached. The COMET program has already weighted the special pays for each rating using inventories. However, in creating a final file for use in a new system, one may have specific knowledge of the unanticipated special pays to be awarded in the associated billets. The user may choose for each rating to use the default average, deselect the pay or use the full amount. The following special pays are included in the model: flight, hazardous duty, diving pay, hostile fire, submarine duty, foreign language proficiency pay, special duty, certain places, career sea, family separation, and overseas housing allowance.



#### **2.2.2.2 Specify Indirect Costs - Enlisted**

The next step is to specify the direct cost options. The following cost elements are available for additional editing:

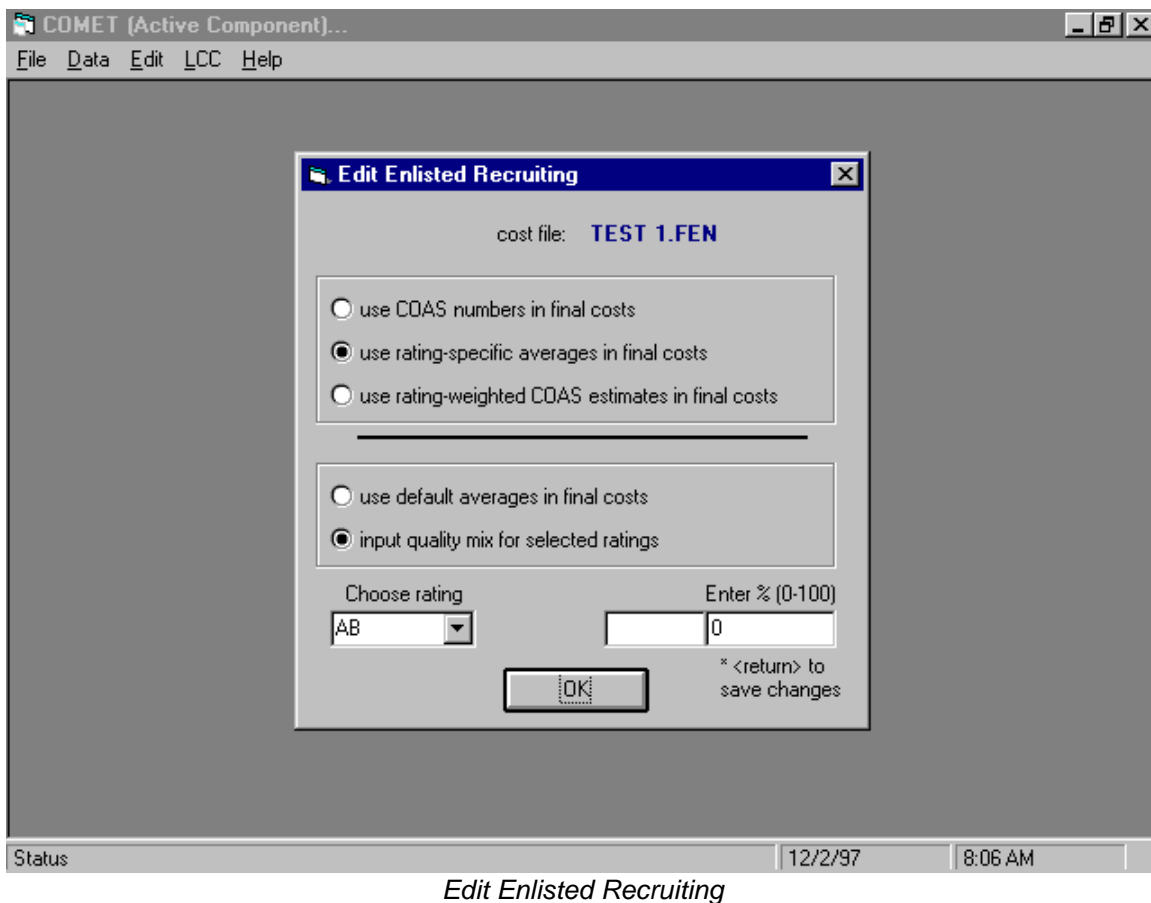
- Recruiting
- Training

##### **Recruiting**

The user has the following three options under recruiting:

- Use COAS numbers
- Use rating-specific averages
- Use rating-weighted COAS estimates





#### *Use COAS Numbers*

This is the default setting. The model calculates recruiting costs using the coefficients generated via the COAS methodology. There is no variation by rating.

#### *Use rating-specific averages*

Under this option, the model uses the recruiting costs provided by the Navy Recruit Command to calculate skill-specific recruiting costs. The model uses the variation in quality mix by rating to appropriate the costs. The user may change the quality mix for selected ratings by selecting that option on the bottom half of the screen. Any change to the mixture is also reflected in the enlistment bonus costs. Note that the user must press the <return> key to save any percentage changes.

#### *Use rating-weighted COAS estimates*

Under this option, the model weights the COAS numbers based on the variation in quality mix. The user may change the quality mix for selected ratings by selecting that option on the bottom half of the screen. Any change to the mixture is also reflected in the enlistment bonus costs. Note that the user must press the <return> key to save any percentage changes.

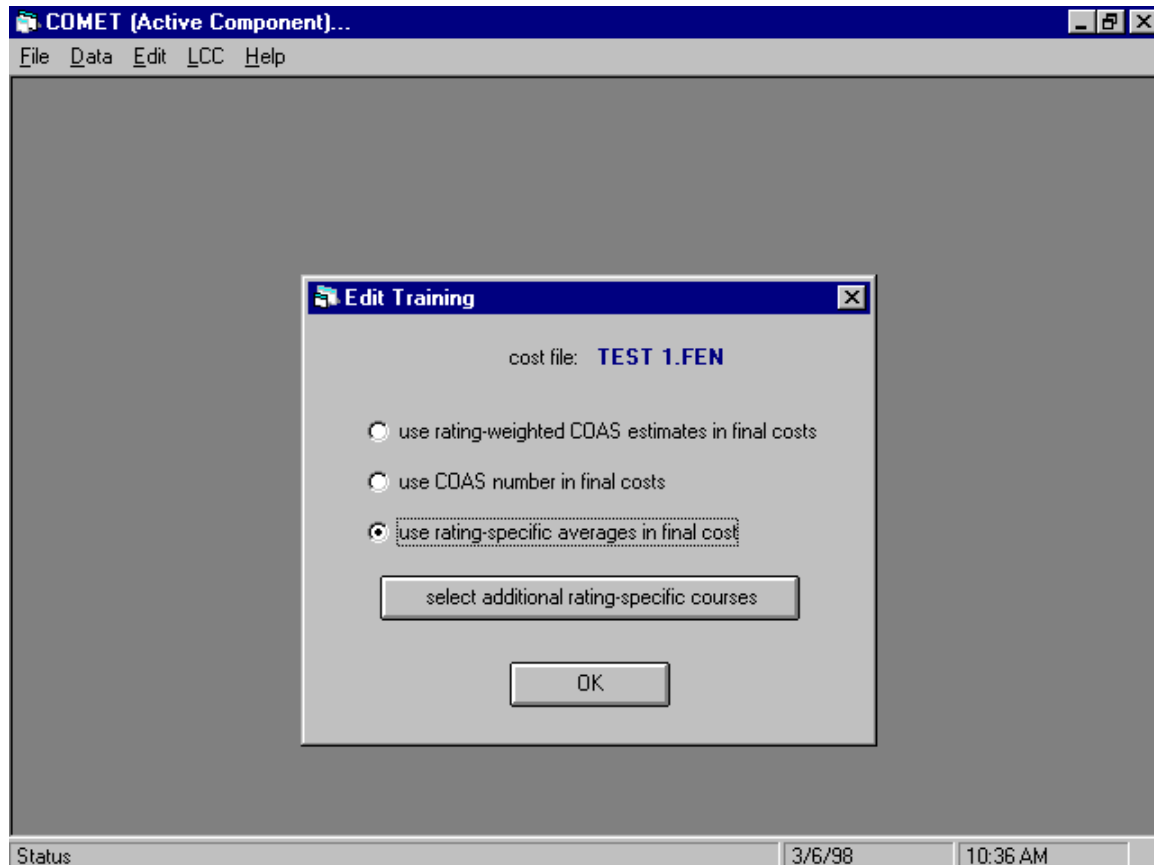


## **Training**

The user has the following three options under training:

- Use rating-weighted COAS estimates
- Use COAS numbers
- Use rating-specific averages

In addition, under the second and third options, the user will be able to add user-specified training by clicking on the button located on the bottom half of the screen.



*Edit Training*

### *Use rating-weighted COAS numbers*

This option will apply a set of community-specific weights generated from the rating-specific averages to the COAS estimates. The model will estimate a multiplicative factor that is the ratio of the skill-specific average training cost to the all-Navy average training cost. This factor will then be applied to the COAS cost. Under this option, the user will be able to supplement the costs with additional courses located in the training cost database.

### *Use COAS Numbers*

The default training costs for enlisted personnel will be provided by the COAS methodology. COAS provides one training cost number for enlisted billets; there is no variation by skill or grade.

*Use rating-specific averages*

This method provides the user with three levels of training costs. The first is the base training cost. This number includes all training that is common to anyone in that grade in the Navy. The second level contains the costs specific to that rating. The third level allows the user to supplement the base and rating training costs with additional courses located in the training cost database.

*User-selected training*

With this option, users will be able to add specific courses from the training cost database to any skill. This will give users the ability to construct a different billet type for an existing rating based on NEC requirements even when using the all-Navy average as a starting point. The user will first select the rating to be modified. The model will display a set of courses available to members of that rating. The user may select up to 20 courses by using the select/deselect button. Note that the letter in the left column changes to a Y when a course is selected. The user must select a grade prior to exiting the screen. Only one grade may be selected per skill. The user must press the "Save Selection" button to write the courses selected to the database.

COMET (Active Component)...

File Data Edit LCC Help

**Edit User Specified Training Courses**

Cost File: **TEST 1.FEN** Enter pay grade: **5** Rating: **//////**

Included	CIN	NEC	OMN	MPN	Student	TOTAL	Description
Y	A-012-0011	9502	994.27	1429.64	2748.00	5171.91	INSTRUCTOR TRAINING
Y	A-012-0023		371.71	464.57	670.29	1506.57	SHIPBOARD INSTRUCTOR
N	A-012-0037	9508	849.33	4674.67	4143.00	9667.00	RECRUIT COMP CDR SCHOOL
N	A-012-0047		288.86	540.57	1527.57	2357.00	A SCHOOL COMP CDR
N	A-012-0051		688.62	1016.69	1661.15	3366.46	TNG MTL DVMT SYS (TMDS)
N	A-012-0052		135.00	137.00	992.00	1264.00	TASK BASED CURR DEV
N	K-041-0014		444.00	1981.50	925.00	3350.50	FIRE SUPPORT MAN
N	J-041-0141		236.00	209.00	171.00	616.00	SMALL ARMS WATCH/RIBBON
N	J-041-0143		355.00	836.00	488.00	1679.00	20MM MACHINE GUN OP & MNT

Enable/Disable Rating Exit Save Selection

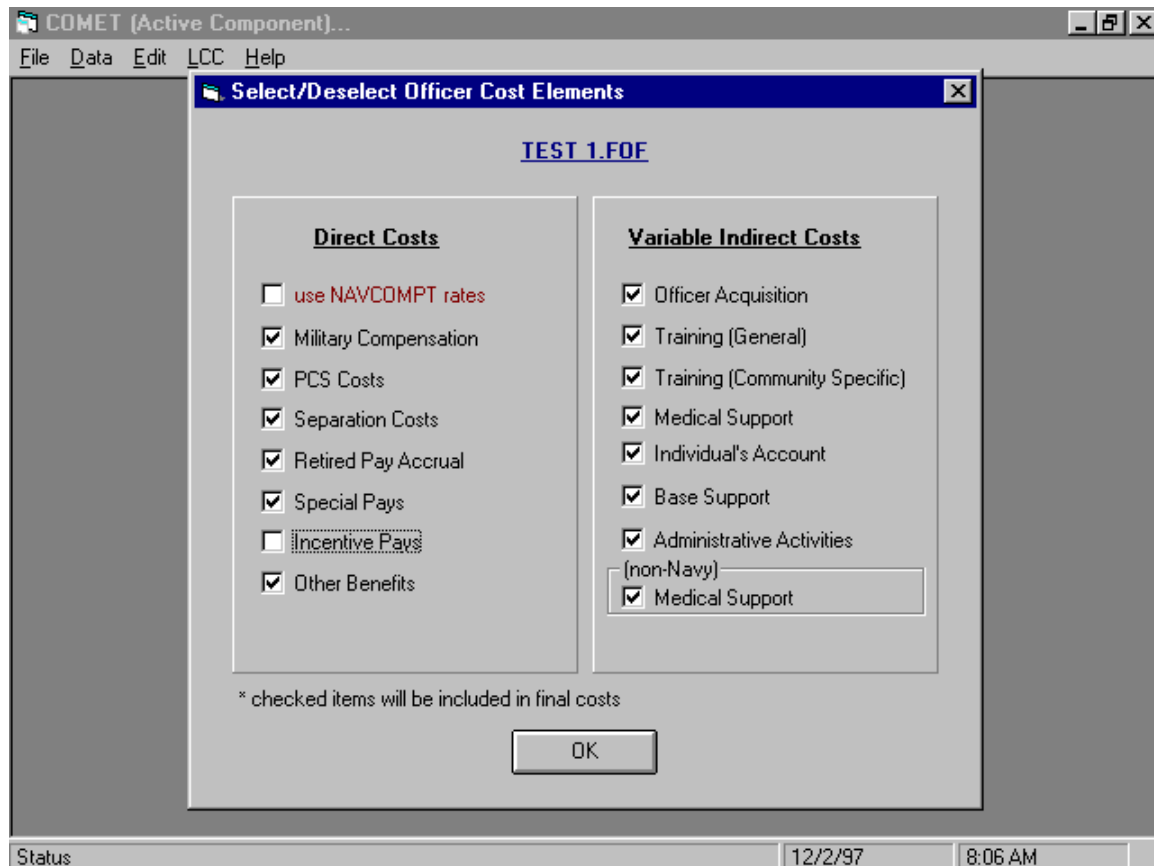
Status 12/2/97 8:06 AM

*User-Specified Training*

### 2.2.3 Edit Officer Costs

In the Final Cost File Editor the user may change some of the underlying assumptions associated with a final cost file. Some of the choices are merely toggles to force the final file to take different weights or variables into account when calculating, while others are more elaborate.

The first step in creating a user-specific final cost file is to select the major cost elements to be included. Simply use the mouse to click on the included costs. Click the “OK” button when finished. Note that under the default, incentive pays are not selected. If the user selects the “use NAVCOMPT rates” option, all other direct costs will be deselected automatically.



*Select/Deselect Officer Cost Elements*

#### 2.2.3.1 Specify Direct Costs - Officer

The next step is to specify the direct cost options. The following cost elements are available for additional editing:

- Military Compensation
- PCS Costs

- Special Pays
- Incentive Pays
- Medical Officer Incentive Pay
- Multiyear Medical Retention Bonus

### **Military Compensation**

There are four components of military compensation - basic pay, BAQ, BAS and VHA. All four can be edited from this screen. The user can choose whether to include basic pay and BAS. He or she can select to calculate BAQ assuming some members receive some BAQ payments in-kind. For VHA, the user may choose to input amounts for specific designator and grade combinations.

COMET (Active Component)...

File Data Edit LCC Help

**Edit Officer Military Compensation**

Cost File: **TEST 1.FOF**

Basic Pay

☒ use default averages in final costs ☐ do not include in final costs

BAQ

☒ all in-cash (used in final costs) ☐ some in-kind

BAS

☒ use default averages in final costs ☐ do not include in final costs

VHA

☐ use default averages in final costs ☒ select designators and grades for i

Choose designator

1100

select grade

01

amount

0

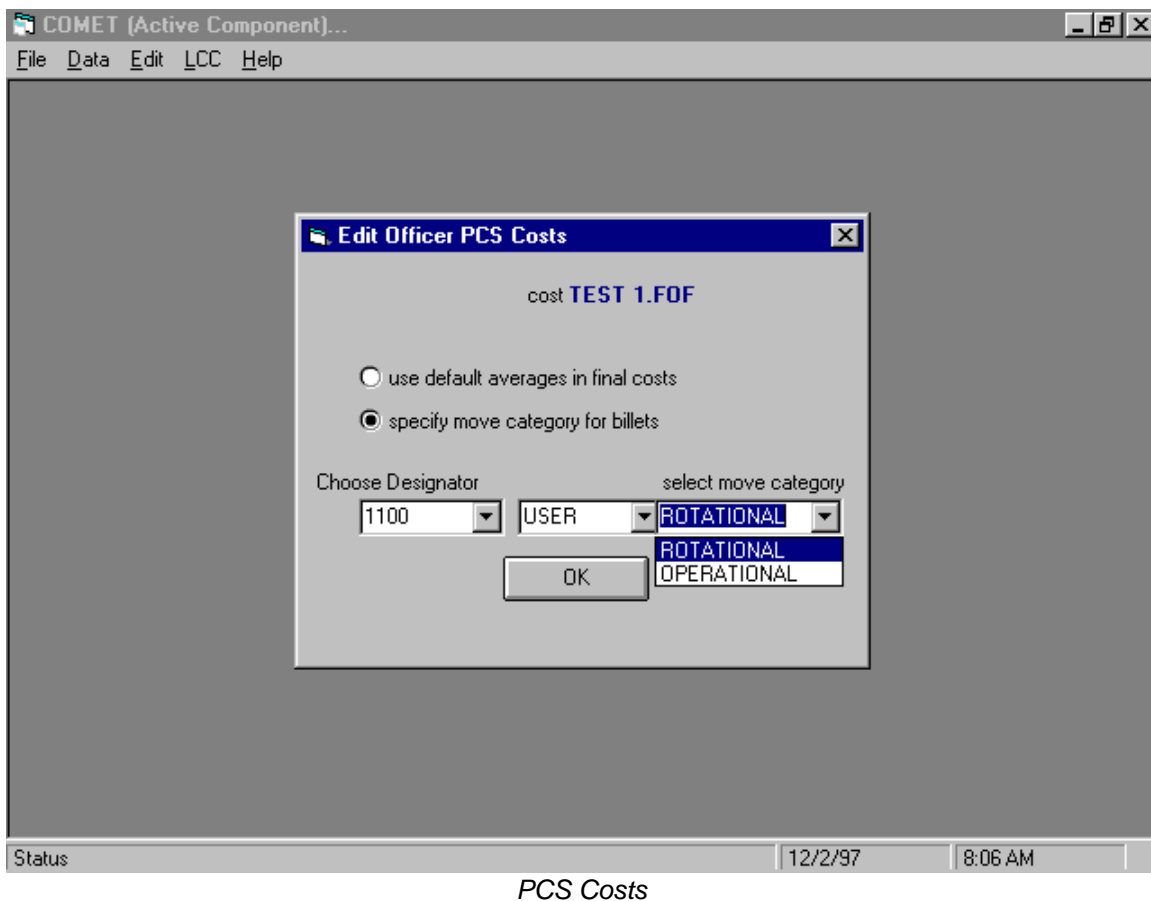
OK

Status 12/2/97 8:06 AM

*Edit Military Compensation*

### **PCS Costs**

For each designator, the user must select whether to use the default average or a user selected move category (second box of the three). Each designator is automatically assigned the default average unless the option is changed in this screen. If the user option is chosen for a rating, the third box will become active. PCS costs will become the full amount of the move category selected here.



### **Special Pays**

The user may choose to select or deselect the special pays to be included in each designator. In this screen, the user must select the designator to which actual costs of a special pay are attached. The COMET program has already weighted the special pays for each designator using inventories. However, in creating a final file for use in a new system, one may have specific knowledge of the unanticipated special pays to be awarded in the associated billets. The user may chose for each designator to use the default average, deselect the pay or use the full amount. The following special pays may be edited in this manner: flight, hazardous duty, diving duty, hostile duty, submarine duty, foreign language, career sea, family separation, overseas housing allowance and nuclear pay.

Special pays awarded to the medical communities are edited separately. The user may select whether to include or not include each of the medical pays. If a pay is selected, the full amount of that pay is awarded to the designator listed to the right of the pay on the screen.

COMET (Active Component)...

File Data Edit LCC Help

**Edit Officer Special Pays**

cost file: **TEST 1.FOF**

☐ use default averages in final costs

☒ select or deselect special pays to be included in final costs

Choose Designator select/deselect/full amount

1100 FLIGHT DEFAULT

Addition Officer special pays

Medical Service

☐ \* Medical Service Corps Officer (2300)

Medical Certification

☐ \* Medical Corps Officer (2100)

☐ \* Dental Corps Officer (2200)

Dental

☐ \* Dental Corps Officer (2200)

Medical Officer Special Pay

☐ \* Medical Corps Officer (2100)

\* if check, full amount will be included in final costs

OK

Status 12/2/97 8:06 AM

*Edit Special Pays*

### **Incentive Pays**

The user may choose to select or deselect the incentive pays to be included in the cost file. If an incentive pay is selected, the full amount is awarded to the designator listed to the left of the incentive pay on the screen. In addition, the user can create a generic incentive pay to be awarded to any designator and grade combination. To do this, the user must select the designator and grade from the bottom half of the screen and then type in the amount of the incentive pay.

COMET (Active Component)...

File Data Edit LCC Help

cost file: TEST 1.FOF

Nuclear

☐ \* Line Officer qualified in Surface Warfare (1110)

☐ \* Line Officer qualified in Submarine Warfare (1120)

Aviation

☐ \* Line Officer Aviation Pilot (1310)

☐ \* Line Officer Aviation NFO (1320)

Certified RN Anesthesiologist

☐ \* Nurse Corps Officer (2900)

Generic incentive pay

Designator grade amount

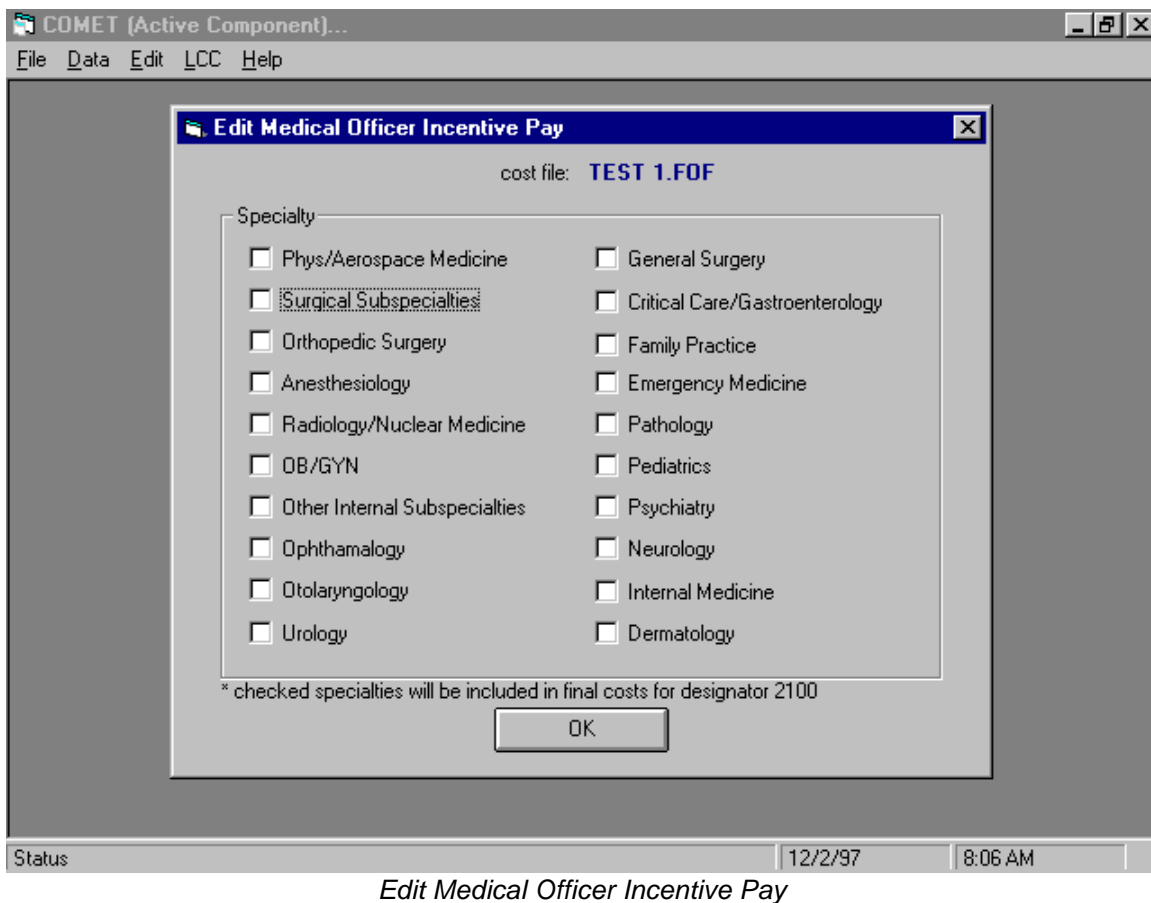
OK

Status 12/2/97 8:06 AM

*Select Incentive Pays*

### **Medical Officer Incentive Pay**

The user can select which medical incentive pays to award to designator 2100. The model will add the full amount of all pays selected to that designator.



### **Multiyear Medical Retention Bonus**

The multiyear medical retention bonus is a bonus paid to medical personnel in certain specialties who sign contracts of 2, 3 or 4 years. The amount of the bonus varies by specialty and length of contract. Under this edit option, the user selects the specialty and length of contract to be awarded to designator 2100.



**COMET (Active Component)...**

File Data Edit LCC Help

**Edit Multiyear Medical Retention Bonus**

Cost file: **TEST 1.FOF**

OB/GYN <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Urology <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Dermatology <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr
Orthopedic Surgery <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	General Surgery <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Internal Medicine <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr
Anesthesiology <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Critical Care/Gastroenterology <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Neurology <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr
Radiology/Nuclear Medicine <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Emergency Medicine <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Psychiatry <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr
Surgical Subspecialties <input type="checkbox"/> 2yr <input checked="" type="radio"/> 3yr <input type="radio"/> 4yr	Pathology <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Pediatrics <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr
Ophthalmology <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Other Internal Subspecialties <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Phys/Aerospace Medicine <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr
Otolaryngology <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	Family Practice <input type="checkbox"/> 2yr <input type="radio"/> 3yr <input type="radio"/> 4yr	

**OK**

\* checked specialties will be included in final costs for designator 2100

Status 12/2/97 8:06 AM

*Edit Multiyear Medical Retention Bonus*

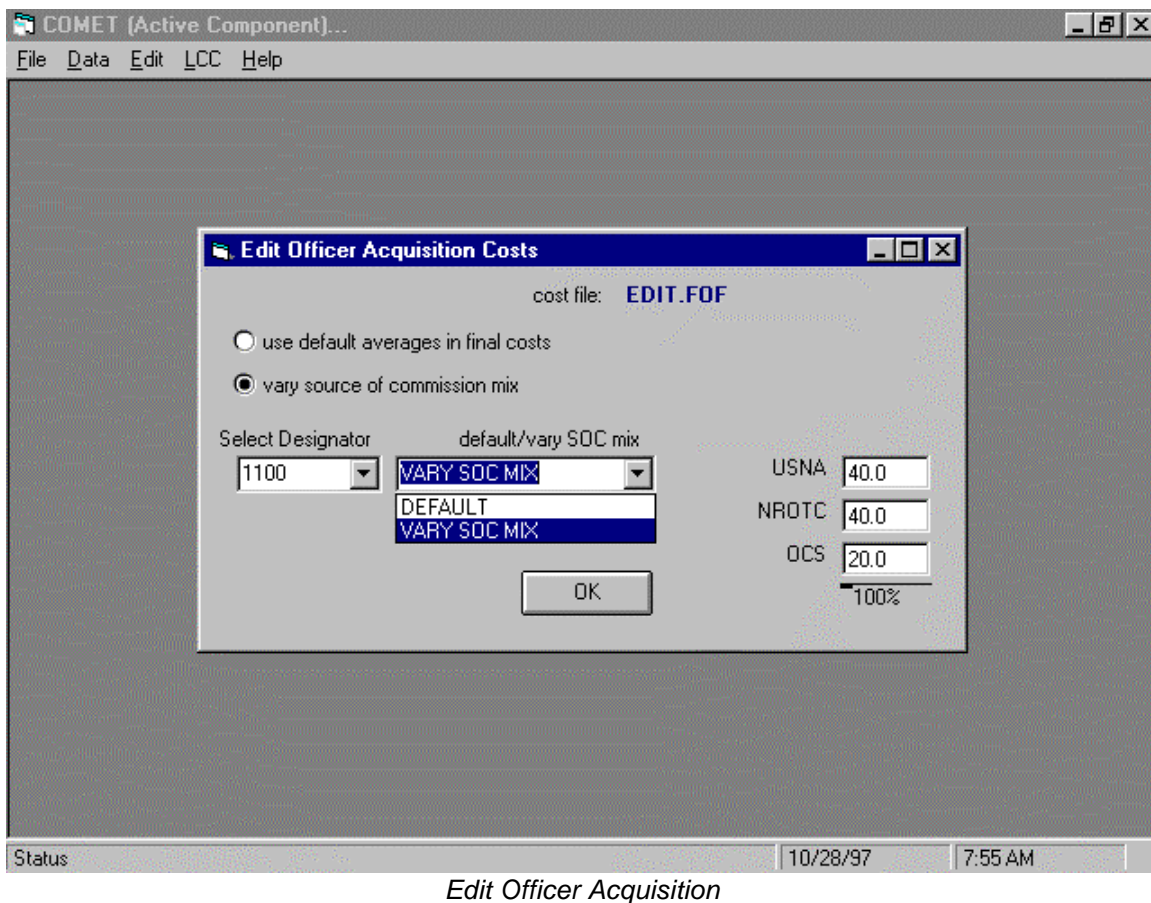
### **2.2.3.2 Specify Indirect Costs - Officers**

The next step is to specify the indirect cost options. Currently, only officer acquisition is available for editing.

#### **Officer acquisition**

The user has the following three options under recruiting:

- Use default averages
- Vary source of commission mix



The default costs have underlying them the current source of commission (SOC) distribution for each designator. The user may chose to vary the SOC distribution for each designator or use the default. Note that that distribution total is forced to 100% by not allowing the user to edit OCS.

## **2.3 LIFE CYCLE COST OPTION**

The Life Cycle Cost Module (LCCM) computes the total undiscounted and discounted costs projected over a variable-length horizon. Each project file contains unit requirements, manpower requirements, and final enlisted and officer cost data. The steps required to build and run a project file are described in this section.

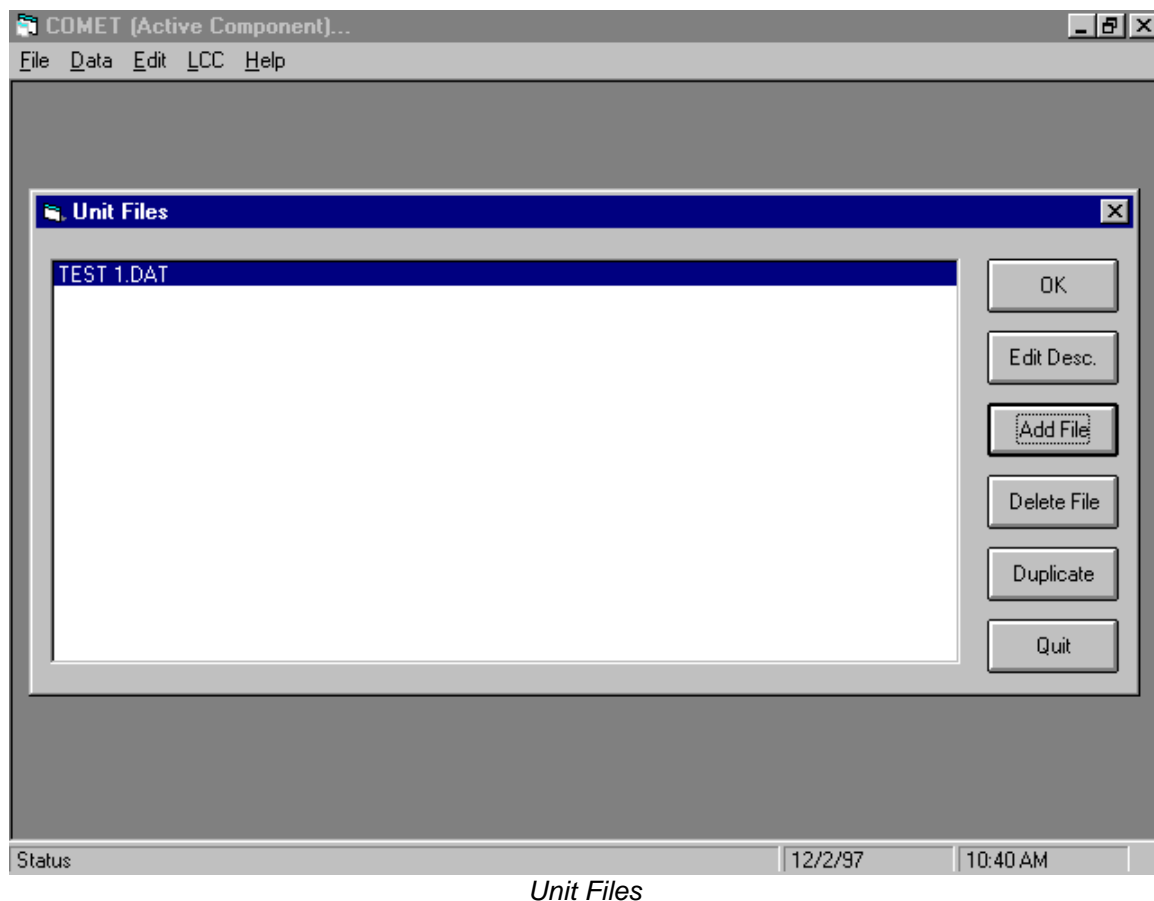
The following menu options are available under the LCC menu option:

- Build Units
- Build System Platform
- Run LCC
- Delta Analysis

### **2.3.1.1 Build Unit**

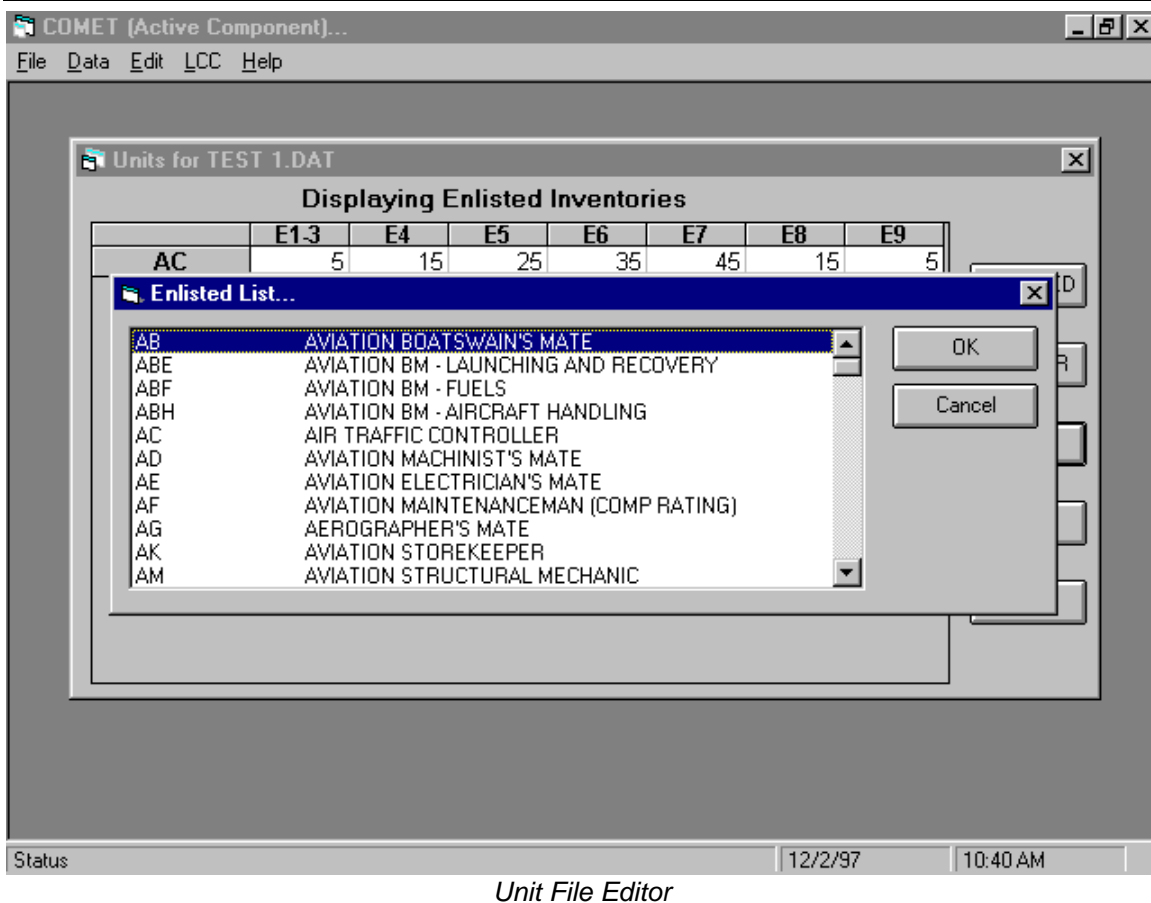
The unit files contain ratings and designators selected by the user. The user enters the grade counts for each rating and designator. There must be at least one unit file defined for the system to operate correctly.

The first screen that appears when selecting the “Unit Files” option is used to create and select the units.



To create a new unit file, select “Add File,” type in a name for the new file (without an extension) when prompted, and press <Enter>. This new file will then be added to the list of choices. Before any editing, this new unit will be empty. After selecting a unit file to edit, the screen will change to display the Unit File Editor where one may add or delete rating and designator inventories. To create a copy of an existing unit file, highlight the filename of the unit to be copied and press the “Duplicate” button. Any unit can be deleted by highlighting its name and pressing the “Delete Enlisted Cost File” button. To select the unit to be edited, highlight its file name and press “OK.”

The Unit File Editor allows the user to add and delete enlisted and officer inventories.



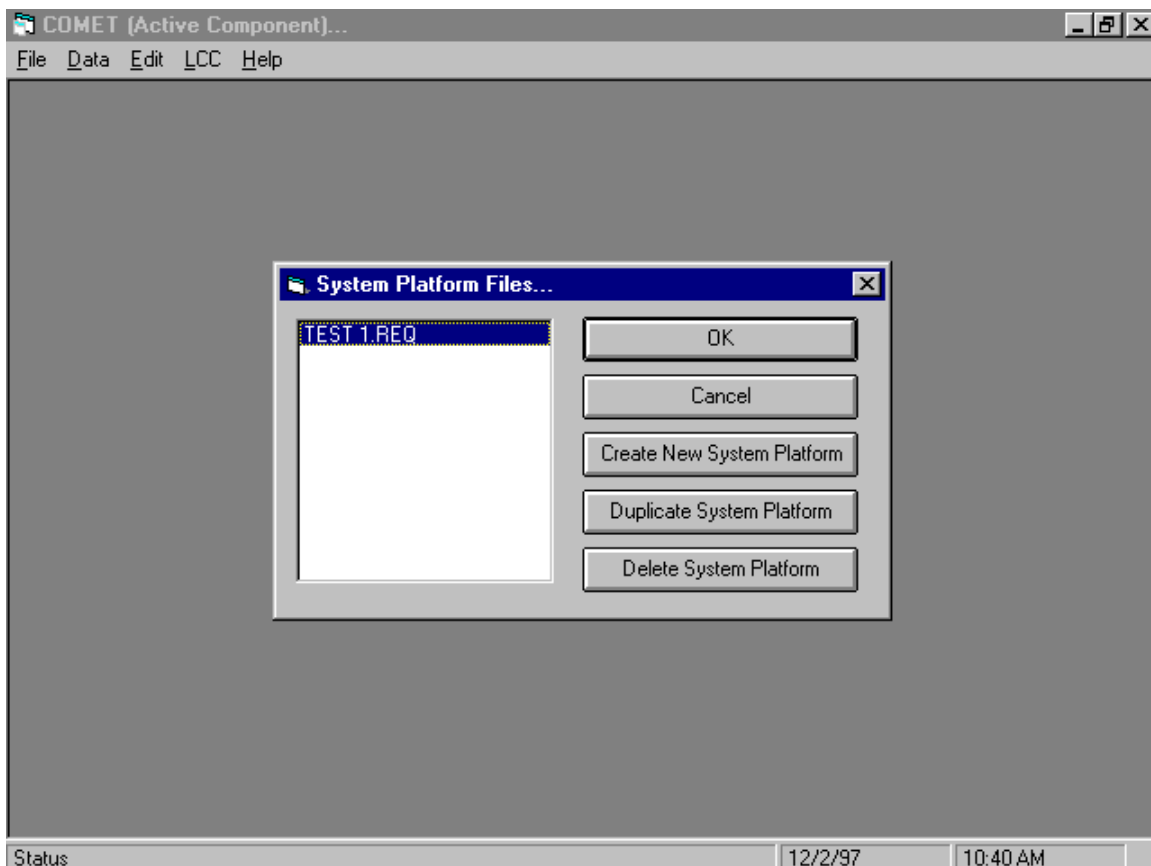
*Unit File Editor*

Move between the enlisted and officer screens by pressing the “Enlisted” or “Officer” buttons. The screen will display the unit inventories by skill and grade. To add an additional skill, press the “Add” button. A list box containing all the available skills will be displayed. Select the desired skill by highlighting it and pressing “OK.” The skill will be added to the list displayed on the Unit File Editor screen. Edit the inventories by clicking in the grade/skill box and entering a new number. When finished, click the “quit” button.

### **2.3.1.2 Build System Platform**

The system platform file contains unit files defined by the user from the “Build Units” option. The user may edit the unit file multiplier that is used to multiply the rating or designator counts by that number. A unit file may exist in one or more years for up to 99 years. The following section describes the steps required to build the system platform.

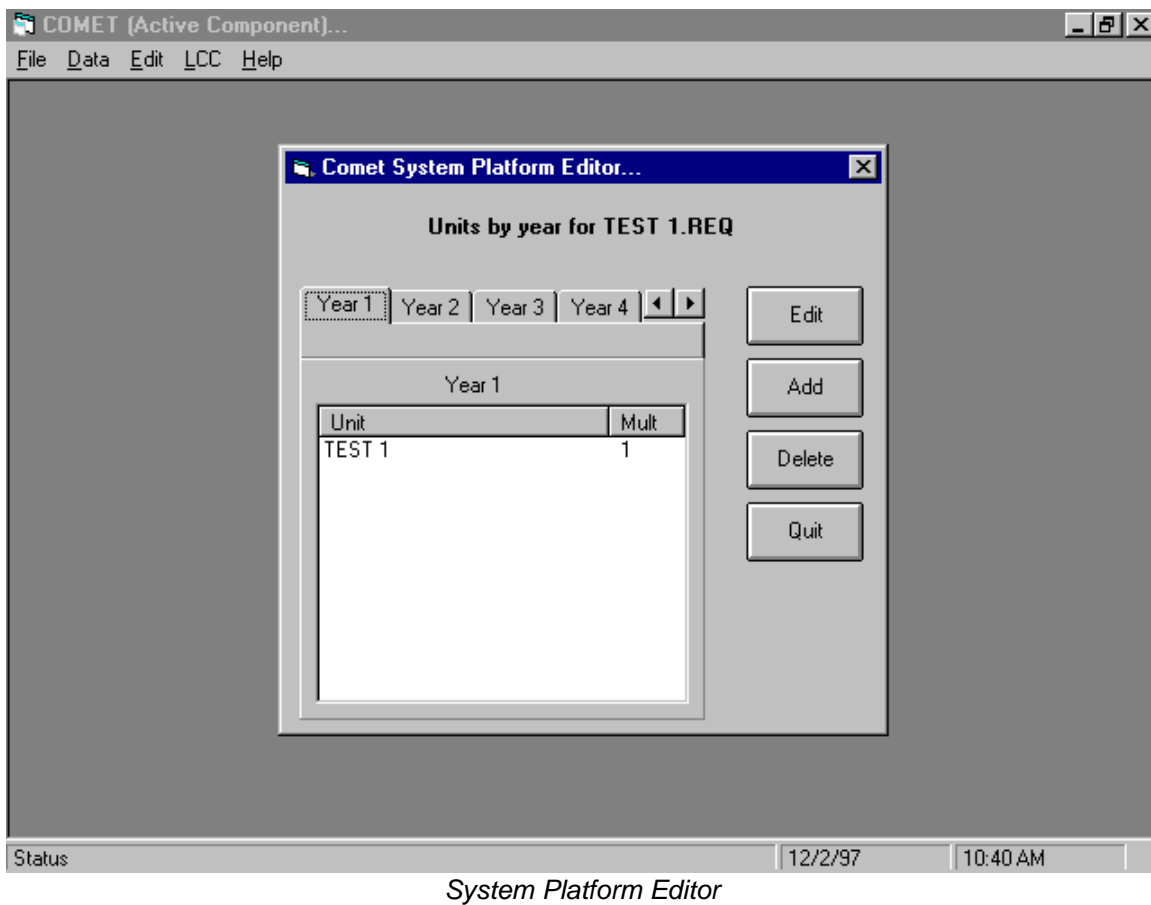
The first screen that appears when selecting the “Unit Files” option is used to create and select the system platforms.



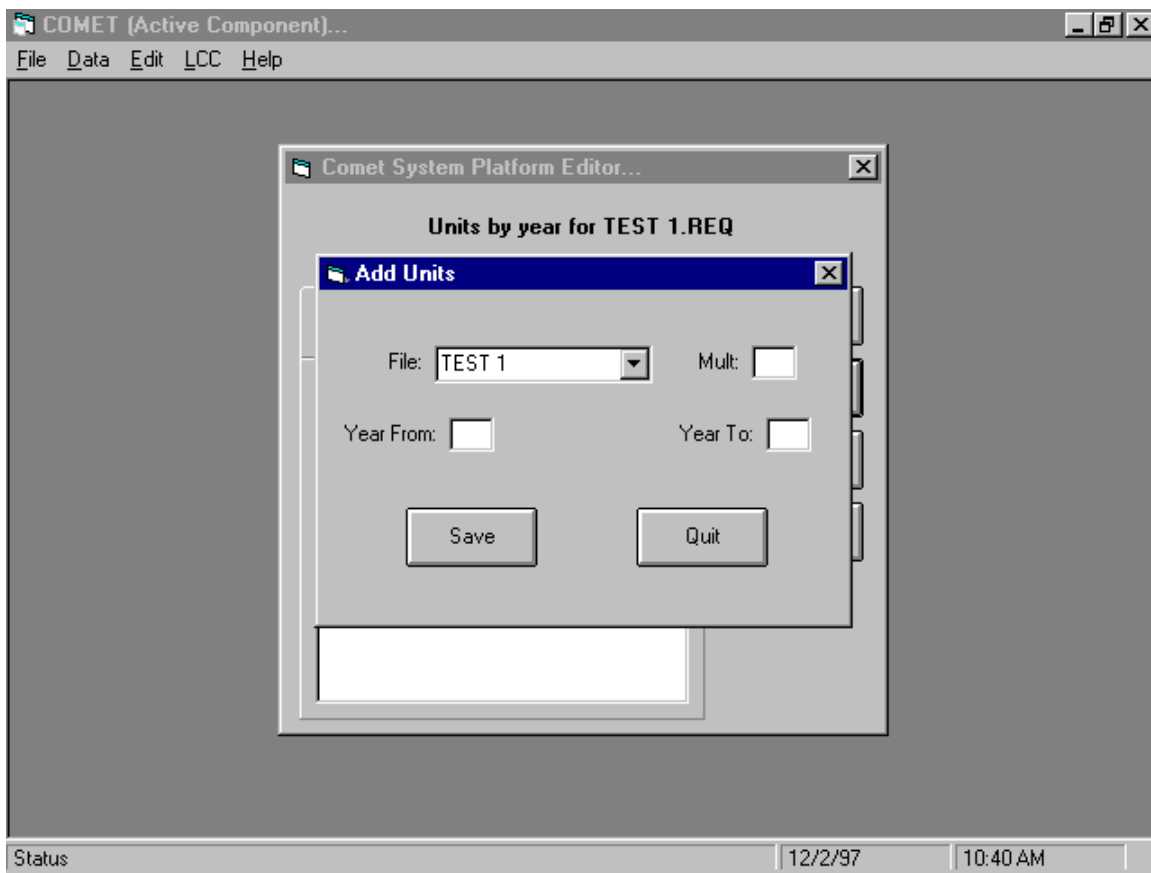
*System Platform*

To create a new system platform file, select “Create New File,” type in a name for the new file (without an extension) when prompted, and press *<Enter>*. This new file will then be added to the list of choices. Before any editing, this new system will be empty. After selecting a system file to edit, the screen will change to display the System Platform Editor where one may add or delete units and multipliers. To create a copy of an existing system file, highlight the filename of the system to be copied and press the “Duplicate” button. Any system can be deleted by highlighting its name and pressing the “Delete File” button. To select the system to be edited, highlight its file name and press “OK.”

After a system is selected, the system platform editor will be displayed. This screen is used to add and delete units from the system as well as edit the multipliers associated with each unit.



Select the year of analysis to edit by clicking on the appropriate tab. Use the arrow keys to the right of the year tabs to move beyond Year 5. Use the “Add” button to add units to a year and the “Delete” button to delete units. To change a unit’s multiplier, highlight the unit and press the “Edit” button. The “Add” button will bring up the add units box. The user will select the unit to be added, input the number of units per year in the multiplier box, and enter the starting and ending years.



*Add Units*

### **Run LCC**

This option allows the user to set the parameters for each Life Cycle Project. To begin, the user must either select or create a project by pressing the “Project Files” button.

**COMET (Active Component)...**

File Data Edit LCC Help

**LCC Parameters...**

Inflation Year 1 Year 2 Year 3 Year 4 Year 5+ Duration of Analysis: 0 Yrs.

MPN 0.00 % 0.00 % 0.00 % 0.00 % 0.00 % Discount Rates: 0.00 %

OMN 0.00 % 0.00 % 0.00 % 0.00 % 0.00 %

Other 0.00 % 0.00 % 0.00 % 0.00 % 0.00 %

Project Files <None Selected> SAVE

System Platform <None Selected> RUN

Enlisted Final Cost Files DEFAULT.FEN VIEW

Officer Final Cost Files DEFAULT.FOF QUIT

		Undiscounted	Discounted
Direct Costs	MPN	0.00	0.00
	Other	0.00	0.00
	sub total (Direct)	0.00	0.00
Variable Indirect Costs	MPN	0.00	0.00
	OMN	0.00	0.00
	Other	0.00	0.00
	sub total (Var. Indirect)	0.00	0.00
<b>TOTAL</b>		<b>0.00</b>	<b>0.00</b>

(numbers are expressed in \$K)

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*LCC Parameters*

To create a new project, select “Create New Project,” type in a name for the new file (without an extension) when prompted, and press *<Enter>*. This project will then be added to the list of choices. To create a copy of an existing project file, highlight the filename of the project to be copied and press the “Duplicate” button. Any project can be deleted by highlighting its name and pressing the “Delete File” button. To select the project to be edited, highlight its file name and press “OK.”

After a project has been selected, the user must select the system platform, enlisted cost database and officer cost database to be associated with this project. Once these are selected, they will be saved under the project heading so that the same selections appear each time the project the project is chosen. These parameters can be changed for any project. Just make different selections and re-save the project. In addition, the user must set the inflation and discount rates and the duration of analysis for the project. Save changes to the project by pressing the “Save” button. Once everything is selected, press the “Run” button to calculate the Life Cycle Costs. The total costs will be displayed on the bottom portion of the screen.



**COMET (Active Component)...**

File Data Edit LCC Help

**LCC Parameters...**

Inflation Year 1 Year 2 Year 3 Year 4 Year 5+ Duration of Analysis: 10 Yrs.

MPN 3.00 % 3.00 % 3.00 % 3.00 % 3.00 % Discount Rates: 5.00 %

OMN 3.00 % 3.00 % 3.00 % 3.00 % 3.00 %

Other 3.00 % 3.00 % 3.00 % 3.00 % 3.00 %

Project Files TEST 1

System Platform TEST 1.REQ

Enlisted Final Cost Files DEFAULT.FEN

Officer Final Cost Files DEFAULT.FOF

SAVE

RUN

VIEW

QUIT

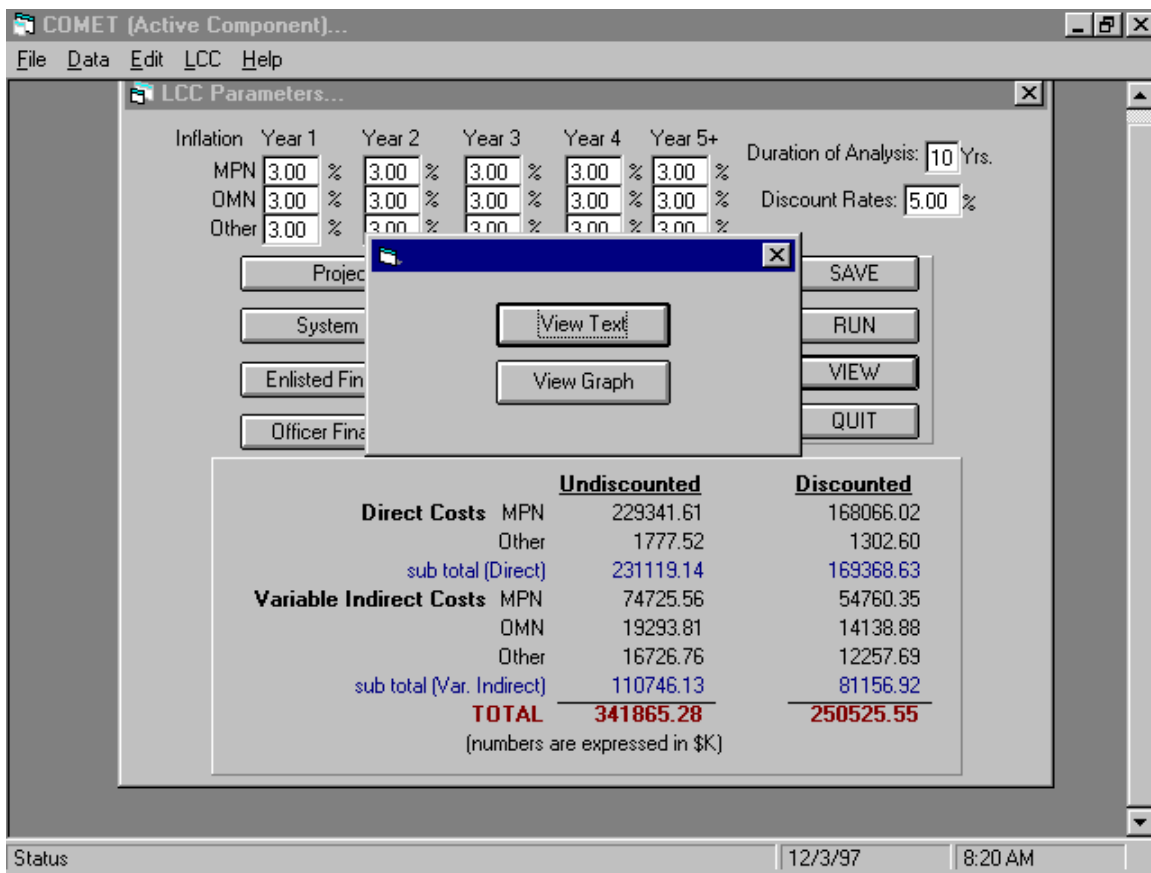
		<u>Undiscounted</u>	<u>Discounted</u>
<b>Direct Costs</b>	MPN	229341.61	168066.02
	Other	1777.52	1302.60
	sub total (Direct)	231119.14	169368.63
<b>Variable Indirect Costs</b>	MPN	74725.56	54760.35
	OMN	19293.81	14138.88
	Other	16726.76	12257.69
	sub total (Var. Indirect)	110746.13	81156.92
	<b>TOTAL</b>	<b>341865.28</b>	<b>250525.55</b>

(numbers are expressed in \$K)

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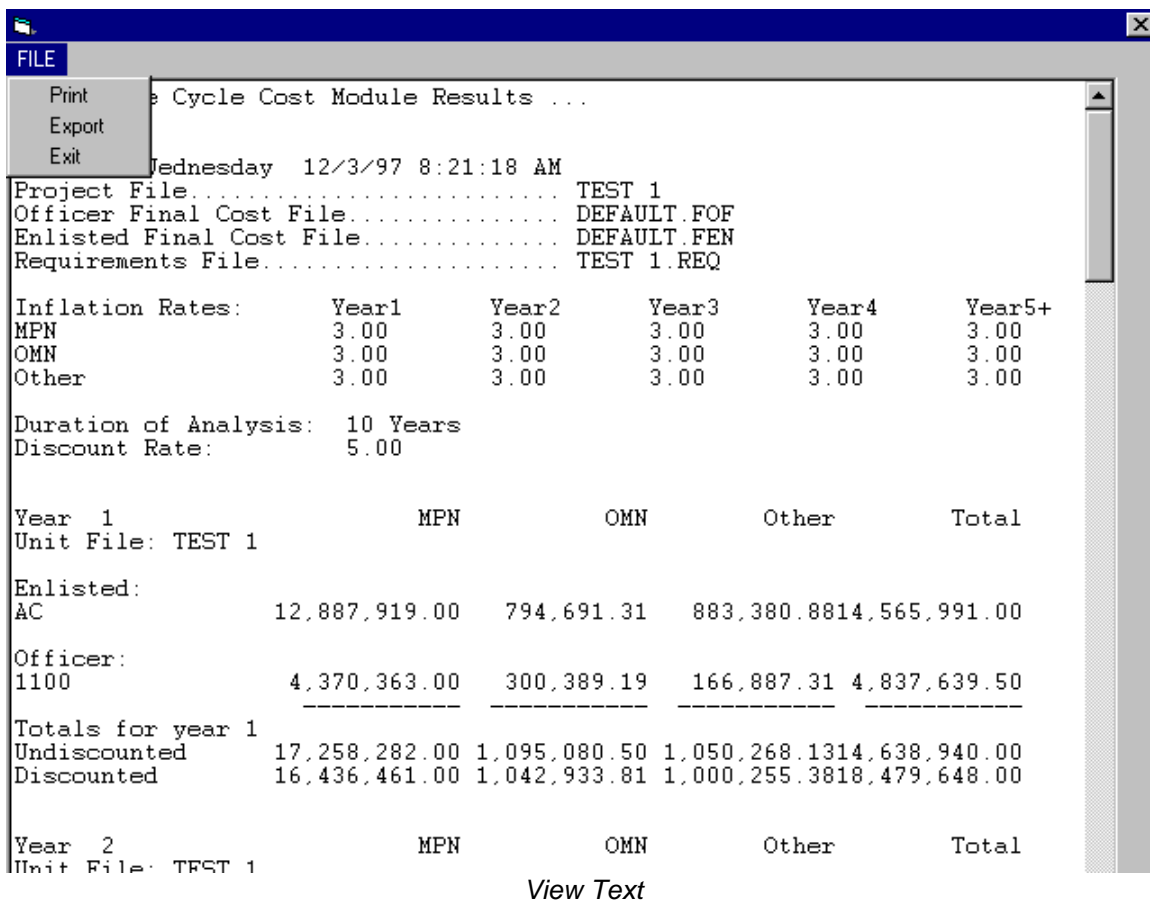
*Final Cost Totals*

To view detailed output, press the “View” button. The user will have the option to view either text or a graph.

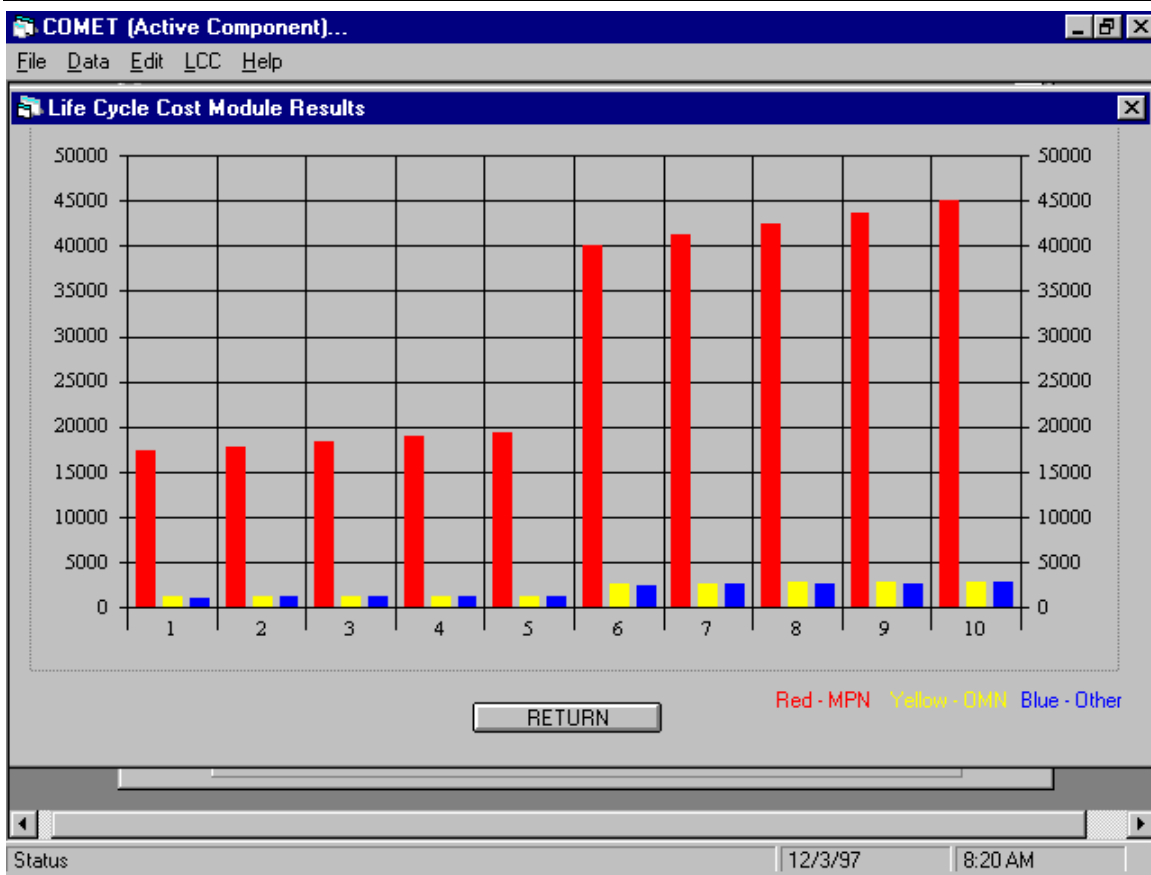


*View Detailed Costs Option*

The “View Text” button will display detailed costs by year, rating/designator and appropriation. It will also display the LCC parameters set for this project. The user may print the output or export to a comma-separated file.



In addition to viewing the text output, the user may view a graphical display of the costs by pressing the "View Graph" button. The model will produce a bar graph of cost by year by appropriation.



*View Graph*